

Claims

1. Make-up composition comprising, as the pigment, cosmetically acceptable fluorescent semiconductor nanoparticles in a cosmetic vehicle.
2. Composition according to claim 1, wherein the cosmetic vehicle comprises a continuous hydrophobic phase.
3. Composition according to claim 1, wherein the cosmetic vehicle comprises a continuous hydrophilic phase.
4. Composition according to any one of claims 1 to 3, wherein the cosmetic vehicle is an emulsion.
5. Composition according to claim 4, wherein the cosmetic vehicle is a W/O, O/W, W/O/W or O/W/O emulsion.
6. Composition according to any one of claims 1 to 5, wherein the fluorescent semiconductor nanoparticles are dispersed in the hydrophobic phase of the cosmetic vehicle.
7. Composition according to any one of claims 1 to 6, wherein the fluorescent semiconductor nanoparticles are dispersed in the hydrophilic phase of the cosmetic vehicle.
8. Composition according to any one of claims 1 to 7, wherein the fluorescent nanoparticles comprise a semiconductor of groups II-VI chosen from MgS, MgSe, MgTe, CaS, CaSe, CaTe, SrS, SrSe, SrTe, BaS, BaSe, BaTe, ZnS, ZnSe, ZnTe, CdS, CdSe, HgS, HgSe and HgTe.
9. Composition according to any one of claims 1 to 8, wherein the fluorescent nanoparticles comprise a semiconductor of groups III-V chosen from GaAs, GaN, GaP, GaSb, InGaAs, InP, InN, InSb, InAs, AlAs, AlP, AlSb and AlS.

10. Composition according to any one of claims 1 to 9, wherein the fluorescent nanoparticles comprise a semiconductor of group VI chosen from Ge, Pb and Si.
11. Composition according to any one of claims 1 to 10, wherein the fluorescent nanoparticles comprise a mixture of a plurality of semiconductors.
12. Composition according to claim 11, wherein the semiconductor mixture is chosen from CdSe/CdS, CdTe/ZnS, CdTe/ZnSe or InAs/ZnSe.
13. Composition according to any one of claims 1 to 12, wherein the fluorescent nanoparticles have a core/shell structure, it being possible for the shell to be formed of a plurality of layers.
14. Composition according to claim 13, wherein the core of the fluorescent nanoparticles is composed of MgS, MgSe, MgTe, CaS, CaSe, CaTe, SrS, SrSe, SrTe, BaS, BaTe, ZnS, ZnSe, ZnTe, CdS, CdSe, CdTe, HgS, HgSe, HgTe, GaAs, GaN, GaP, GaSb, InGaAs, InP, InN, InSb, InAs, AlAs, AlP, AlSb, AlS, PbS, PbSe, Ge, Si or one of the mixtures thereof.
15. Composition according to either claim 13 or claim 14, wherein the shell of the fluorescent nanoparticles is composed of ZnO, ZnS, ZnSe, ZnTe, CdO, CdS, CdSe, CdTe, MgS, MgSe, GaAs, GaN, GaP, GaSb, InAs, InN, InP, InSb, AlAs, AlN, AlP, AlSb or one of the mixtures thereof.
16. Composition according to any one of claims 13 to 15, wherein the shell has a thickness of between 1 and 10 monolayers.
17. Composition according to any one of claims 1 to 16, wherein one or more fluorescent nanoparticles have been previously coated with a hydrophobic ligand and then complexed into a micelle with a size of between 5 and 45 nm, the micelle being formed of a hydrophobic core and a hydrophilic envelope, the hydrophobic core containing a plurality of hydrophobic groups, the envelope containing a plurality of hydrophilic groups, each hydrophobic group containing at least one chain, each chain comprising at least 8 carbon atoms, the number of

carbon atoms for all the hydrophobic chains of a single group being greater than or equal to 24.

18. Composition according to claim 17, wherein the micelle comprises phospholipids.

19. Composition according to either claim 17 or claim 18, wherein the hydrophilic group is a polysaccharide.

20. Composition according to claim 19, wherein the polysaccharide is chosen from agarose, dextran, starch, cellulose, amylose or amylopectin.

21. Composition according to either claim 17 or claim 18, wherein the hydrophilic group is a copolymer of polyethylene glycol.

22. Composition according to any one of claims 1 to 21, characterised in that it is a nail varnish.

23. Composition according to any one of claims 1 to 21, characterised in that it is a lacquer.

24. Composition according to any one of claims 1 to 21, characterised in that it is a cream.

25. Method for preparing a composition according to any one of claims 1 to 24, comprising steps consisting of :

- i) provision of fluorescent nanoparticles;
- ii) if necessary, a previously compatibility treatment of the fluorescent nanoparticles;
and
- iii) introduction of the fluorescent nanoparticles treated in this way into a cosmetic vehicle.